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Variation in Collaborative Arrangements: Analysis of U.S.-based Natural Resource Partnerships

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Abstract

The buzzword in natural resources management these days is collaboration. Touted as the new way to plan, from the U.S. Secretary of the Interior Gale Norton's office to the Bureau of Land Management's Tucson Field Office, collaborative planning and collaborative partnerships are being integrated throughout the federal land management agencies. In the words of one federal agency, collaboration is "a cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands" (U.S. Bureau 2000a, 3).

Utilizing inductive analysis, this exploratory research examines both the extent to which the Bureau of Land Management (BLM) has adopted collaboration as a decision making process and the types of arrangements it has formed with other interested stakeholders to develop and implement natural resource management policy. Data for this paper was collected through an online survey administered to BLM Field Office managers and planners. Collaborative arrangements were compared based on process goals, foci, geographic scope and other characteristics. To examine variation in collaborative arrangements, statistics package for the social sciences (SPSS) was used to generate descriptive and inferential statistics. This research is supported by a grant from the Community-Based Collaborative Research Consortium at the University of Virginia.

Introduction

Federal Land Management: The Shift from Scientific to Ecosystem Management

At the turn of the Twentieth Century, the United States federal government set aside large tracts of land as "public" lands. In a country that cherishes private property and the myth of rugged individualism, the idea to retain in federal ownership the public domain was and continues to be a radical proposition (Limerick 1987). The federal government owns nearly one-third of all the land in the U.S., equaling nearly 657 million acres. The majority of it is in Alaska (73%); twenty-two percent is in the western U.S. and the remainder is scattered across the mid-west and eastern portions of the country. The two primary land managers are the U.S Forest Service (USFS), which overseas 192 million acres, and the Bureau of Land Management (BLM), the largest land manager, is responsible for 267 million acres. The remaining lands are managed by the Fish and Wildlife Service (87 million acres) and the National Parks Service (77 million acres) (Bryner 1998).

One of many challenges to emerge since the designation of the first public lands has been defining the decision-making roles of land management professionals and citizens owners of the lands. In particular is the question of whether planning is a scientific-technical process in which public participation is largely an information-sharing activity, or a social-political activity where decision making is shared between professional land managers and the public (Carr 1998). Traditionally, federal agencies have taken the former approach. More recently the public has demanded that they institute the latter. There is evidence that federal land management agencies are beginning to adopt more collaborative, consensus-based planning processes (Selin 2000; Wondolleck 2000). This shift can be attributed in part to the agencies' adoption of ecosystem management as the primary management framework (Haeuber 1996). In contrast to traditional resource management, which valued quantification and commodification of natural resources (Steel and Weber 2001), ecosystem management stresses the need for collaborative decision-making based on holistic and integrative science, where goals and management objectives are determined by social values, and adaptability is emphasized to attain healthy, diverse and productive public lands (Cortner 1998; Grumbine 1994).

Planning scholars and practitioners argue that collaboration is especially salient for natural resources planning for a number of reasons: it is useful for addressing complex problems that are multijurisdictional in nature; it provides diverse stakeholders demanding a greater role in the planning process the opportunity to participate in public lands decision-making; and it offers a means for developing a coordinated and holistic planning approach that coincides with the requirements of ecosystem management (Gray 1989; Margerum 2000; Schuett 2001; Weber 2000; Wondolleck 2000). Utilizing an institutional perspective, this paper examines the types of interorganizational network-based arrangements forming between one federal land management agency, the BLM and other entities (e.g., other government agencies, environmental groups, industry) and interested individuals (e.g., local landowners, recreationalists). This exploratory research looks at variation between collaborative arrangements across various factors including degree of formalization, actor types, goals, issue foci, meeting frequency and other characteristics. The next section outlines theories pertinent to examining these collaborative natural resource partnerships.

Theoretical Background

Collaborative, consensus-based decision making and management appear to be the most recent trend in the field of planning and policy formation processes. Policy making over the last century has been influenced by numerous models including: hierarchical, corporatist (market-based), and interest group pluralism (Meadowcroft 1998). According to Healey (1999), an institutional perspective of collaboration enables us to understand the shift in policy designs from well-defined policy communities to forms more conducive to grass roots citizen groups and businesses. Innes and Booher (1999), utilizing an institutional lens, view the rise of collaboration as part of a social shift in response to changing conditions in an increasingly networked society, "where power and information are widely distributed, where differences in knowledge and values among individuals and communities are growing, and where accomplishing anything significant or innovative requires creating flexible linkages among many players" (Innes and Booher 1999, 412). Gray (1989) explains that collaborative initiatives represent an emergent form of interorganizational arrangement, which offer an alternative to traditional approaches like centralized planning and the courts that "no longer provide sufficient adaptive responses at either the individual or societal level" (Gray 1989, 236-37).

Scholars have noted this recent trend in new patterns of policy formulation, or governance as some refer to it (Borzel 1997; Glasenbergen 1998; Rhodes 2000), where government partners working with private and non-profit organizations, in non-hierarchical decision-making settings, develop and implement public policy (Moon 2001). This emerging form of public administration emphasizes the role of civil society in the development of public policy through the mechanisms of communication and dialogue. Several social and political factors have been attributed to this rise in collaborative, network-based governance, including: 1) the increasingly specialized tasks and limited competence and resources of modern administration (Borzel 1997); 2) highly uncertain and complex problem environments (Glasenbergen 1998; Gray 1989; Innes and Booher 1999); 3) the devolution of responsibility for services from central governments to semi-autonomous public agencies (Meadowcroft 1998); and 4) the delegitimization of government due to irresponsible use of state power (Moon 2001). According to Borzel (1997), these realities have made governments increasingly dependent up the cooperation and joint resource mobilization of policy actors outside their hierarchical control.

Numerous terms are used to describe the various types of joint arrangements within the organizational and public policy literatures, including: partnerships (Leach 2001), policy networks (Borzel 1997), issue networks (Helco 1978), policy communities (Carlsson 2000), advocacy coalitions (Sabatier and Jenkins-Smith 1993), and collaborations (Gray 1989) or collaborative management regimes (Meadowcroft 1998). The arrangements can take on a variety of structures and levels of formalization, varying from informal "adjustments" to more formal deliberations, depending on the goals and objectives of the collaboration.

Cigler (1994), Mandell (1999), Gray (1989) and Cestero (1999) have outlined several elements that are useful for examining and comparing collaborative arrangements like the: 1) complexity of purpose (info sharing vs. joint problem-solving) (Cestero 1999); 2) intensity of the linkages (measured by common goals, decision rules, shared tasks, resource commitments) (Gray 1989); 3) formality of agreements (informality vs. formality of rules guiding operating structures,

policies and procedures) (Cigler 1994); 4) degree of interaction (voluntary vs. mandatory participation; as-needed basis vs. regularly scheduled meetings) (Mandell 1999); and 5) participating stakeholders (e.g., who participates, how do they join the process) (Cestero 1999). Utilizing these factors, collaborative initiatives can be systematically compared.

At the national level within the BLM collaboration is being espoused as an alternative and desirable approach to planning. For example, the latest *Land Use Planning Handbook* (U.S. Bureau 2000b) encourages staff to use collaborative planning, and describes numerous potential benefits, including "improving communication, developing a greater understanding of different perspectives, and finding solutions to issues and problems" (I-4), however, it does not mandate its use. Anecdotal evidence shows that some field offices in the BLM are adopting collaborative planning and forming collaborative natural resource partnerships with various stakeholders (SI 1999; U.S. Bureau 2000a); however, there has not been any systematic study to assess the extent to which field offices are adopting these processes and forming collaborative partnerships, nor an examination of the types of arrangements that are being developed (e.g., community-based/intergovernmental; formal/informal, etc). Understanding the variation in collaborative arrangements is useful because it helps potential participants choose the most effective approach for their given issues or situation (Cestero 1999). Therefore, this paper addresses these needs by providing an agency-wide review of collaboration, assessing both the degree to which field offices are utilizing collaborative planning, and the types of arrangements being established.

Research Method

Agency Justification

The BLM provides an ideal case for examining the rise of collaboration within a natural resources agency for several reasons. Of the four land management agencies[2], it has been studied the least, hence, analyzing the BLM will add to the basic knowledge of this often misunderstood institution. Second, BLM lands are facing demands from multiple, and often conflicting, uses ranging from ranching and mineral development to more recent uses like motorized and non-motorized recreation (Knight 1998). Given these pressures, the BLM is a particularly unique agency to study with respect to its adoption of collaborative planning processes. And third, recent publications show evidence that the agency is committed to being more responsive to and cooperative with local governments and communities in addressing multijurisdictional problems (U.S. Bureau 1994; U.S. Bureau 2000a; U.S. Bureau 2000b). Since the agency is shifting from traditional to more inclusive collaborative planning processes, a strong argument can be made for the need to examine the types of arrangements being formed. Combined, these reasons provide a compelling case for making the BLM the focus of this project.

Sample and Data Collection Method

BLM managers and planners working in field offices, as apposed to state or national offices, were targeted for this study because they are the two staff groups most likely to have first-hand experience with collaboration. To collect data from managers and planners, an online survey

[2] The four federal land agencies are the Forest Service, the Bureau of Land Management, the National Parks Service, and the Fish and Wildlife Service.

was developed[3] and administered in Fall 2000. It covered the following three broad topics: 1) intergovernmental coordination and planning (e.g., linkages with other governmental entities for planning, management and administrative activities), 2) community-based collaborative planning (e.g., collaborative process/partnership goals, focus, geographic scope, and level of satisfaction on outcomes), and 3) general questions on collaborative planning (e.g., strengthens and weaknesses). This paper focuses primarily on data obtained from the second section of the survey. Contact information for all BLM Field Managers in 146 field offices in the U.S. was obtained from the BLM's Office of Planning, Assessment, and Community Support in Washington, D.C[4]. Initial contact with field managers was through a mailed letter introducing the research project. A week later, field managers were sent an email, with a link to the online survey; because direct email contact was not available for planners, field managers were asked to forward the email to planners working in their office. A reminder email was sent two weeks later. In all, 128 BLM staff responded to the online survey; these responses came from eighty-nine field offices. The response rate, based on the number of field offices, was 60 percent.

Findings

The findings section is divided into two parts. The first provides a summary of the descriptive analysis for all collaborative arrangements reported on by BLM staff. The second section provides analysis of different types of collaborative arrangements, comparing the influence various arrangements have on structural, process and participation characteristics.

Description[5]

Out of the eighty-nine field offices that responded, fifty-two staff from forty offices reported on forty-seven collaborative arrangements[6]. Table 1 shows the number of collaborative arrangements occurring by state.

Table 1: Total number of Collaborative Arrangements by State

State	Total	State	Total
Arizona	1	New Mexico	5
California	4	Oregon	13
Colorado	5	Utah	1
Idaho	3	Washington	1
Montana	3	Wyoming	8
Nevada	3	**TOTAL**	**47**

[3] The web was selected as the medium through which to administer the survey for several reasons: all BLM field office staff have access to the web and utilize email; staff at the BLM's National Training Center have utilized this method and had good response rates; it is an economical way to administer a survey; and its reduces the time required for data entry because survey results can be downloaded directly into MS Excel.

[4] With the exception of three offices located in the mid-west and east coast, all field offices are located in: Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah and Wyoming.

[5] Unless noted otherwise, all percentages shown are "valid percentages" in that missing data is excluded. In situations where data is missing, it is generally for only 1 or 2 cases.

[6] There were five collaborative arrangements where two respondents from the same field office provided information on the same process; in order to address variations in their responses, the responses were averaged to create a new respondent profile for these cases. Thus, data in the findings section, which reports on 47 collaborative arrangements is based on 47 respondents.

The greatest number of collaborative arrangements are in Oregon and Wyoming field offices. Part of the reason for extensive collaboration in Oregon may be related to the state's interest in and support for watershed councils. Several of the processes reported on by the staff in Oregon field offices were described as watershed councils. In Wyoming, a number of the field offices described their experiences with coordinated resource management, a collaborative process designed for administering grazing permits.

The survey was administered to managers and planners working in field offices. Survey respondents break down by job type into the following categories: Field Office Managers (59%), Assistant Managers (12%), Planners (21%), and Natural Resource or Rangeland Management Specialists (8%).

The descriptive analysis of the forty-seven collaborative arrangements provides an overview of the collaboratives' structure (e.g., type, initiation, group size, meeting frequency), process (e.g., goals, focus, formality, decision-making, geographic scope), and participation (e.g., participant involvement and type) characteristics.

A) Structure: Type, Initiation, Group Size, and Meeting Frequency

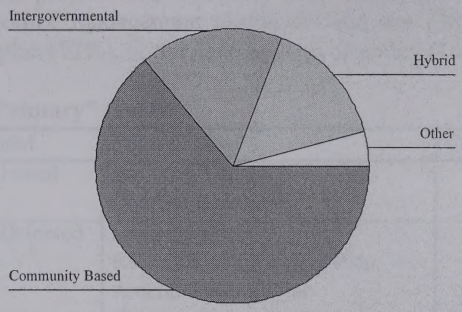
Structurally, collaborative arrangements differ in terms of their type, either community-based or intergovernmental, who initiated them, group size and meeting frequency.

To ascertain the type of collaborative arrangement respondents were asked to select which of the following definitions best described theirs:

- Community-based: a watershed council, dialogue group or partnership that is focused on more than one problem or issue and has open membership.
- Intergovernmental: a cooperative or coordinated process between two or more governmental entities for information exchange, joint planning and/or joint implementation of plans or projects.
- Mediated Negotiation: a process facilitated by a neutral party to resolve specific disputes, where participation is limited to representatives of groups involved in dispute.

Sixty-five percent of the collaborative arrangements were characterized as community-based, 17% were labeled as intergovernmental, and 2% were considered mediated negations. In fifteen percent of the cases, respondents described their arrangement as both intergovernmental and community-based; in this analysis, these are referred to as hybrids. Figure 1 graphs the collaborative arrangements by type; the other category includes the mediated negotiation process and one missing case.

Figure 1: Collaborative Arrangements by Type



The majority (73%) of the collaborative arrangements that BLM field offices are involved in were either started by the field office, or in conjunction with another entity, such as a local government or non-profit organization. Seventy percent of the arrangements were started prior to the year 2000. In many cases, field offices may have turned to collaboration because traditional planning processes have failed to produce outcomes that the majority of stakeholders are satisfied with, leading to increased legal and administrative appeals (Wondolleck 2000). This was certainly the case for the Sonoita Valley Planning Partnership, a collaborative process started by the BLM Field Office in Tucson, Arizona. Staff initiated the alternative process after experiencing fierce opposition to a plan developed through a traditional planning process (Laninga 2002).

The number of participants engaged in collaborative arrangements varies greatly, ranging from just five participants to over forty regular attendees. Thirty percent of the arrangements have between 1-10 participants, 40% have between 11-20, and 28% have between 21-30. Among scholars studying collaboration, there is debate regarding the optimal size of groups and their ability to take action. Some, including O'Tool and Montjoy (1984) and Flynn and Harbin (1987) argue for intensive participation by a small number of stakeholders who are intimately connected to the issue at hand. Gray (1989) and Innes (1996), on the other hand, argue for an extensive process that encourages the participation of all interested stakeholders. While the debate is far from being resolved, it seems that the size will likely be linked to both the issues being addressed and the number of stakeholders with an interest in the outcome.

Another structural characteristic was the frequency with which groups met. In general, 49% of collaborative arrangement met once a quarter or more frequently (e.g., one or twice a month). The others tended to meet on an "as-needed" basis.

B) Process: Goals, Focus, Formality, Decision-Making and Geographic Scope

In this section, arrangement goals, foci, degree of formality, decision-making mechanism and geographic scope are described.

Collaborative arrangements often have several goals. In this survey, respondents were asked to rank a number of goals according to whether it was primary, secondary, or not applicable. For

example, as noted in Table 2, the goals of building trust and conflict resolution were primary for 65% and 46% of the cases, respectively. Over half of the collaborative arrangements stated that implementing on-the-ground projects was a primary aim. Fewer groups have as primary goals the development of a resource management (28%) or land use (36%) plans, creation of an amendment to an existing plan (12%), or the development of policy (16%).

Table 2: Percentage of "Primary" Goals*

Type of Goal	Primary Goal	Cases (%)
Social-Oriented	Building Trust	65
	Conflict Resolution	46
Planning-Oriented	Land Use Plan	36
	Resource Management Plan	28
	Amend Existing Plan	12
	Develop Policy	16
Project-Oriented	On-the-Ground Project	52

*Total do not equal 100% because respondents could select more than one goal.

Looking at these goals cumulatively, it appears that socially oriented goals (e.g., resolving conflict) tend to be important. As Table 3 depicts, a fifth of the cases identified social goals as their primary aim, while 37% percent stated that both social and either planning or project-oriented goals were important. Less than 10% of the cases had only planning or project-oriented goals. Another twenty percent of groups stated that all goal types, social, planning and project-oriented were important for their process.

Table 3: Goal Orientation of Collaborative Arrangements

Goal Orientation	Cases (%)
Social	20
Planning	9
Project	9
Social/Planning or Social/Project	37
Planning/Project	4
Social/Planning/Project	20
Total	100

This data supports the literature emphasizing the important role of collaboration in building relationships between diverse stakeholders and the resulting benefits that may emerge. Healey explains that collaboration enables individuals to move beyond self-interest, to incorporate "networks of social relations within which systems of meaning and ways of acting are constituted" (Healey 1999, 115). The development of shared capital (i.e., social, intellectual and political) within a collaborative process is lauded as one of the major benefits of this alternative decision-making process (Innes 1994)[7]. These forms of capital, which gain value as they are

[7] Innes et al (1994) define social capital as "trust, norms of behavior, and networks of communication," which create the potential for serious discussion to occur among otherwise conflicting actors; intellectual capital is understood as "agreed upon facts, shared problem definitions, and mutual understanding," which provide a common basis for discussion, moves actors toward agreement on issues, and allows for coordinated actions; political capital is "alliances and agreements on proposals that provide mutual gain," and makes it possible for proposals to be adopted and implemented.

used, can help create mechanisms for coordinating actions among stakeholders in the future (Gray 1989).

In addition to considering collaborative arrangement goals, the survey queried respondents on the types of issues they were addressing. Major foci for groups, as noted in Table 4, included watershed health, water quality, wildlife habitat, rangeland health, livestock grazing, endangered animal species, and noxious weeds. A number of foci were identified as less important for collaboratives, these included: wildfire, air quality, timber harvest, energy (e.g., oil, gas, coal bed methane) and mineral development.

Table 4: Major Foci for Collaborative Arrangements*

Major Foci	Cases (%)
Watershed Health	84
Water Quality	70
Wildlife Habitat	64
Rangeland Health	52
Livestock Grazing	48
Endangered Animal Species	46
Noxious Weeds	44
Minor or Not a Focus	
Energy Development	87
Mineral Development	65
Wildfire	52
Air Quality	50
Timber Harvest	44

*Total do not equal 100% because respondents could select more than one goal.

The degree of formalization is another process characteristic considered for collaborative arrangements. The survey defined a formal process as one where participants have signed memoranda of understanding, or other legally binding agreements; an informal process is where this has not occurred. In this study, collaborative arrangements were nearly evenly divided between formal (43%) and informal (41%), with 11% considered both; the level of formalization was not indicated for five percent of the cases.

In this study nearly three-quarters of the cases rely on consensus-based decision making. The remaining quarter of the cases utilize other means for decision-making including majority vote or a combination of consensus and voting. In two cases, respondents described their groups as educational and information sharing forums rather than decision making processes, where the agency presents and listens to ideas from other stakeholders (Respondents 18 and 38). "We use this CRM [coordinated resource management] group as a public and agency forum for discussion and information dissemination. BLM makes the actual decisions for what occurs on public lands that we manage" (Respondent 18).

A final process characteristic is the geographic scope or scale at which the collaborative is focused. Evidence from the respondents suggests that ecosystem management, which stresses the importance of managing in accordance to ecological boundaries rather than administrative borders (Grumbine 1994), has influenced their perspective on the geographic scope of their

planning and decision making. As noted in Table 5, only 11% of the cases limit their focus to the BLM's administrative boundary, while 4% focus at the county-level. Seventy-two percent address issues from a regional or watershed scale.

Table 5: Geographic Scope of Collaborative Arrangements

Geographic Scope	Cases (%)
Administrative Boundary	11
County	4
Region	33
Watershed	39
Other	13
Total	100

C) Participation: Involvement and Types of Participants

Another aspect of collaborative arrangements that the survey covered was the way that participants join and the types of stakeholders that participate. In terms of how participants become involved, 40% do so through self-selection, in other words, they chose to participate, while for 27% of the groups, participants are assigned. In another 27% of arrangement, members join through a combination of means including self-selection and assignment, or they participated because they were invited or recruited by BLM field office staff. In only one case participants joined through election.

Stakeholders in collaborative arrangements include government staff (e.g., from federal, state and local agencies), private organization representatives (e.g., forest and logging companies, commercial recreation guides, private property rights interests, national and local environmental groups, and land trusts), and individuals (e.g., ranchers, academic researchers, individual recreationalists, and members of the general public). As can be seen in Table 6, over half the cases have involvement from at least three federal, state and local government entities, while over a quarter have between 4-6 representatives from these various levels of government. However, the table also shows that the representation of private organizations and individuals, while more evenly divided across the categories, is higher on the top end of the scale, with forty-two percent of arrangements having 7 or more stakeholders representing private organizations or individual interests.

Table 6: Number of Participant Types by Category

	Participant Category			
Number of Participants	Federal	State	Local	Private
None	2	0	0	5
1-3	56	57	67	20
4-6	31	29	24	33
7-9	9	12	2	22
10+	2	2	7	20
Total	100	100	100	100

This finding is relevant to the debates occurring within the natural resources collaboration literature. Many critics of this approach are concerned that these arrangements enable local, private interests to gain unprecedented control over decision making for public lands (Coggins 1998; McCloskey 1996). While these concerns may be credible, proponents of collaborative arrangements remind us of two important realities. First, community-based collaboratives are a supplement to existing agency processes, they are not, and should not be seen as a substitution for or replacement of current arrangements (Leach 2001; Weber 2000), and second, the BLM and other federal agencies are, by law, solely responsible for final decisions made for public lands, to devolved this authority would be illegal (Moote and McClaren 1997). Thus, collaborative planning is important for diversifying participation as well as increasing the type and source of information to improve decision-making (Innes and Booher 1999), however is should not be used as a mean to delegate decision-making for public lands to local interests.

Stakeholders involved in the collaborative arrangements represent a variety of different government and non-governmental entities. Table 7 provides a list of the primary participants from each category. For example, column 1 shows federal agency participants. Fifty-five percent of the arrangements included staff from the USDA Forest Service, 47% had participants from the DOI Fish and Wildlife Service, 30% had representatives from USDA Natural Resources Conservation Service, and 20% had staff from the Environmental Protection Agency. The most often represented agencies for state and local government are listed, as well as those organizations and individuals within the "private" category. Native American tribal organizations participated in about a quarter of the collaborative arrangements.

Table 7: Primary Organizations Represented in Collaborative Arrangements

Federal Agencies (%)	State Agencies (%)	Local Agencies (%)	Private Orgs & Agencies (%)
Forest Service (55)	Division of Fish and Wildlife (75)	County Commissioners (64)	Local Environmental Groups (70)
Fish and Wildlife Service (47)	State Lands Department (32)	Resource Conservation Districts (34)	General Public (64)
Natural Resource Conservation Service (30)	Water Resources (26)	Cooperative Extension Service (32)	Ranchers (57)
Environmental Protection Agency (20)	Department of Forestry (26)	Weed Control Districts (25)	National Environmental Groups (47)
	Department of Agriculture (21)		Nonmotorized (43) and Motorized (38) Recreation Interests
			Academic Researchers (36)
			Logging Industry (32)
			Private Property Rights Groups (30%)

Over the last several pages, the forty-seven collaborative arrangements reported on by BLM staff were described according to the arrangements' structure, process and participation characteristics. In the following section, the types of arrangements (community-based, intergovernmental and hybrid) will be compared to examine their influence on the various characteristics.

Analysis and Discussion

Relying on cross-tabulations, this section discusses the ways that the types of collaborative arrangements (community-based, intergovernmental and hybrid) might influence the structural aspects (e.g., group size, meeting frequency), process characteristics (e.g., goals, focus, formality, decision-making, geographic scope) and participation information (e.g., joining and types) of these collaboratives. Findings highlight both variation and similarity among the types of collaborative arrangements with which the BLM is engaged.

A) Structure: Group Size and Meeting Frequency

With respect to structural characteristics, there appears to be a degree of variation in terms of group size and the frequency with which collaborative groups meet.

Looking at Table 8, it appears that hybrid groups tend toward smaller numbers of participants, with 43% having between 1-10 stakeholders. In the case of the intergovernmental arrangements over half have between 11-20 participants. Community-based, as would be expected, are more extensive, encouraging participation from all interested stakeholders; 39% of the cases have been 21-30 stakeholders, while 32% of the community-based arrangements have between 21-30 regular attendees.

Table 8: Type of Collaborative Arrangement by the Number of Group Attendees

	Number of Attendees (%)				
Collaborative Arrangement	1-10	11-20	21-31	31+	Total
Community-Based	29	39	32	0	100
Hybrid	43	29	14	14	100
Intergovernmental	14	57	29	0	100

This finding is somewhat curious. While the larger group size for community-based arrangements and the moderate group size for intergovernmental tend to make sense, the small group size for hybrid is less apparent. Community-based groups would tend to be larger given that there would be numerous groups, particularly private organization representatives and individuals involved and since these groups also usually have an open-door policy. Using the same logic, hybrid groups, which are a combination of community-based and intergovernmental, should also tend toward larger group sizes. The data shows otherwise. One explanation for their smaller group size might be that these groups have more defined aims, which may attract a more limited number of interested stakeholders.

The frequency with which collaborative arrangements met was another factor that exhibited some variation across types. As noted in Table 9, over 50% of the community-based and 40% of the hybrids met on a quarterly or more frequent basis, while almost three-quarters of the intergovernmental groups met on an "as needed" basis.

Table 9: Type of Collaborative Arrangement by Meeting Frequency

Collaborative Arrangement	Meeting Frequency (%) Once/Quarter or More	Twice a Year	As Needed	Don't Know	Total
Community-Based	53	7	40	0	100
Hybrid	40	0	40	20	100
Intergovernmental	29	0	71	0	100

One possible explanation for the intergovernmental groups' tendency for meeting on an "as need" basis may be because staff in these organizations have more frequent informal interactions with each other than members of hybrid or community-based collaboratives. During these informal interactions (e.g., phone calls, talking in the hall, etc), they are able to address issues more directly with out needing to convene all the stakeholders. Hybrid and community-based groups, on the other hand may require more frequent meetings because they lack the informal networks. In addition, since the community-based arrangements tend to have more stakeholders, they may need to meet more regularly in order to work through issues, make decisions, and implement plans.

B) Process: Goals, Focus, Decision-Making, and Geographic Scope

Several process characteristics including issue focus, the decision-making mechanism, and geographic scope did not show much variation between types of collaborative arrangements. Goals, however did show some variation.

Goals, when described as being either socially, planning, or project-oriented, showed some variation based on the type of collaborative arrangement. Intergovernmental arrangements, as shown in Table 10, appear to be the most project-oriented, with 63% emphasizing on-the-ground projects as their primary goal. Hybrid arrangements reported that both social goals and planning goals were important, while community-based collaboratives tend to focus on both social and project-oriented goals.

Table 10: Type of Collaborative Arrangement by Goal Orientation

Collaborative Arrangement	Goal Orientation (%)* Social	Planning	Project
Community-Based	43	37	47
Hybrid	43	71	57
Intergovernmental	25	38	63

*Totals do not equal 100% because respondents could select more than one goal orientation.

This variation in goal-orientation may be explained by a few reasons. Intergovernmental groups may have less need to overcome conflict or build trust because participants may have a history of working together, whereas this may not be the case for participants in community-based and hybrid arrangements. Thus, intergovernmental groups can focus their goals on more tangible projects, where participants know their responsibilities and have the resources to implement them. Whereas hybrid groups may tend toward planning-oriented goals because stakeholders are interested in making their planning more efficient by working jointly with others who also need

to develop plans within the same or similar region (e.g., US Forest Service, State Forestry, County Open Space). Community-based arrangements may focus more on social and project-oriented goals since they might need to resolve conflicts or build trust between historical adversaries (e.g., ranchers and environmentalists, farmers and federal agency staff), and because they may want to show tangible results through visible projects.

The remaining process factors, including issue foci, decision-making, and geographic focus did not show much variation across the different collaborative arrangements. Considering the types of issues a group focuses on, over two-thirds of all types of arrangements focused on water quality, watershed health and wildlife habitat. Rangeland health and endangered species were also important for over half of the community-based and hybrid arrangements, though not for intergovernmental. One possible reason for why groups tend to have similar foci may be due to the requirements of certain federal laws like the Clean Water Act and the Endangered Species Act. For example, Section 303(d) of the federal Clean Water Act requires that states identify all waters where effluent discharges exceed the total maximum daily load (TMDL); once identified, states are to prioritize waters by severity and develop plans for reducing effluent discharges. These plans impacted activities of all parties near waters that violated the TMDLs.

The method of decision-making also showed little differentiation among the types of collaborative groups. In all three types, consensus was the primary manner in which groups made decisions. This may be the case because as noted in the literature, an important element of a collaborative process is consensus-based decision-making (Gray 1989; Innes 1996). Arrangements, regardless of type, tend to adhere to this basic tenet of collaborative planning.

Finally, geographic scope, or the scale at which groups focus their work, showed little distinction between the collaborative types. As can be seen in Table 11, the primary scope for all arrangements was the region or watershed.

Table 11: Type of Collaborative Arrangement by Geographic Scope

	Geographic Scope				
Collaborative Arrangement	Agency Boundary (%)	County (%)	Region/ Watershed (%)	Other (%)	Total (%)
Community-Based	17	7	69	7	100
Hybrid	0	0	86	14	100
Intergovernmental	0	0	63	37	100

A plausible explanation for this similarity in geographic scope may be related to the fact that in the early 1990s, the BLM, in addition to many of the other federal land management agencies, adopted ecosystem management as its primary management framework (Haeuber 1996). Ecosystem Management emphasizes planning based on ecological boundaries rather than administrative borders.

C) Participation: Involvement and Types of Participants

Participation was compared across types of collaborative arrangements in terms of how stakeholders join and by looking at the types of actors that participate in the various collaborative arrangements. In both of these cases, there was little variation. In terms of how participants join

the process, the highest percentage for each type fell within the self-selection category. This lack of variation may be explained by the fact that one of the major tenet of collaboration is that all those with an interest or stake in the process should be at the table (Gray 1989; Innes 1996). For the most part, BLM arrangements have an open-door policy; all those interested in participating are welcome. Likewise, for types of actors, there is little variation across various collaborative types. All types tend to have similar percentages of participants representing the various levels of government (federal, local, state) as well as the private groups. Again, this may be reflective of the fact that the BLM is interested in ensuring representation from all the participant categories, regardless of the type of arrangement.

Conclusion

This paper, utilizing inductive exploratory research, provides information not only on the extent to which the BLM is engaged in collaboration, but also how the types of arrangements might influence various structural, process and participation characteristics. This analysis highlights both variation and similarity among the arrangements. For several of the factors, including issue focus, decision-making, geographic scope, stakeholder type, and manner of joining, there was little difference between community-based, intergovernmental and hybrid. However, there were some apparent differences between the types of collaborative arrangements and their affects on group size, meeting frequency and types of goals.

These findings should interest the BLM and other land management agencies considering initiating collaborative arrangements. For instance, an office that initiates a community-based arrangement will more likely address socially oriented goals over planning goals, whereas an intergovernmental arrangement will tend toward project-oriented goals. The type of collaborative arrangement may also influence meeting frequency and group size. Offices that may feel the need to meet on a regular basis may steer towards community-based or hybrid groups, while those that have previously developed relationships may prefer an intergovernmental arrangement. Doing so might more appropriately match the type of collaborative and the field office's planning goals and strategy. Finally, an office should consider the number of stakeholders with which they need to work. If they initiate a community-based group, they should be aware that they are likely to have a larger number of regular attendees than if they have a hybrid or intergovernmental group.

While this paper provides a descriptive analysis of BLM's experience with collaboration, the next stage of my research will study the context within which collaborative arrangements emerge and are sustained within the BLM over time. According to Steelman (2000) "little is understood about the preconditions and arrangements that facilitate successful interaction between agencies and the public" (Steelman 2000, 126). Webler and Tuler (2000), who have studied public participation processes, concur, explaining that there is a need to understand the factors relevant to creating or maintaining social conditions that are conducive to collaborative participatory arrangements. My future research will address this need by examining conditions within the social environment that enable and sustain collaborative arrangements.

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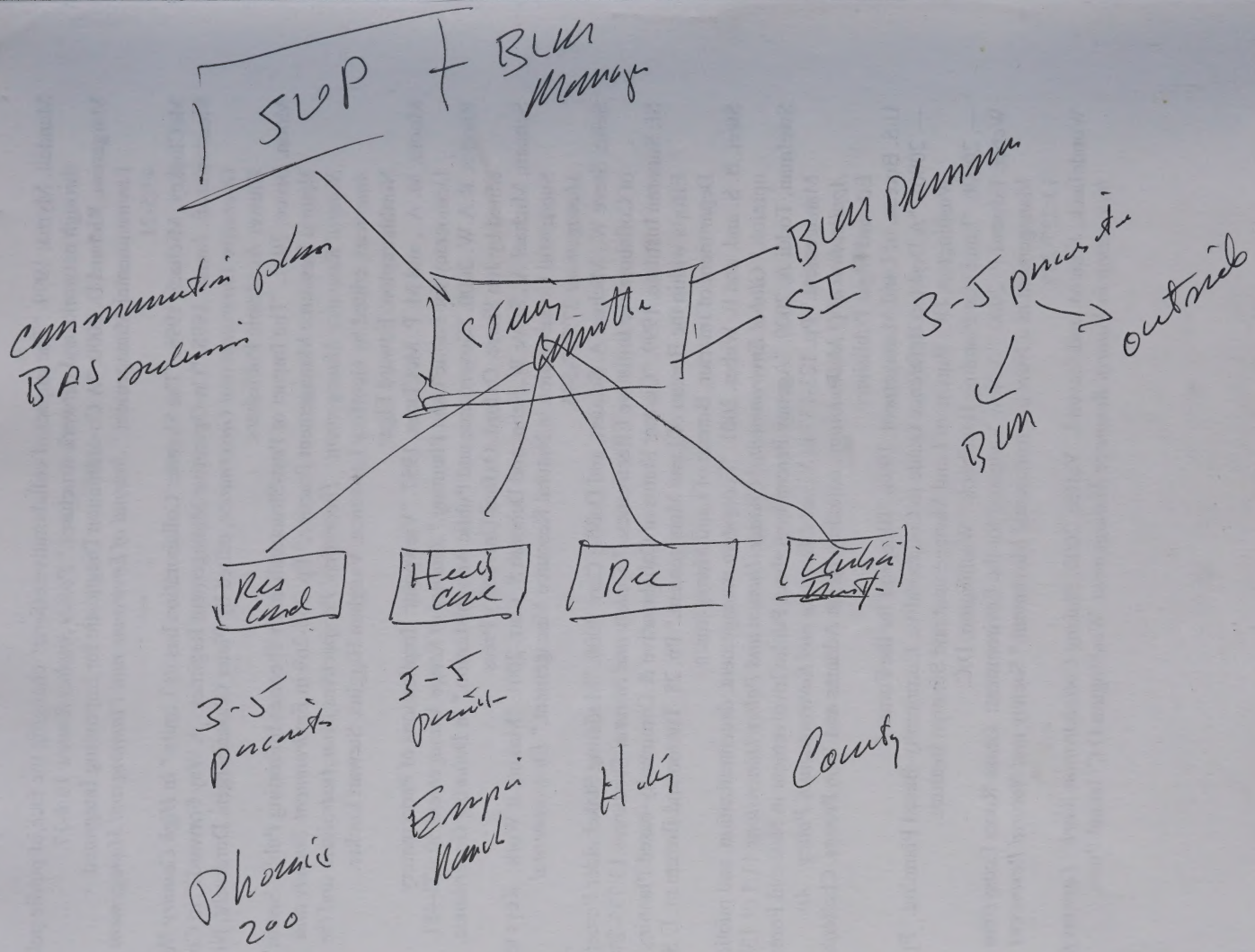
SUP
BLM Manager
Communication plan
BAS selection
Steering Committee
BLM Planner
SI
3-5 parcels
outside
BLM
Res Cond
Health Care
Rec
Urban Trust
3-5 parcels
3-5 parcels
Phoenix 200
Empire Ranch
Holy
County